

1 Amendments to the Claims:

2 This listing of claims will replace all prior versions, and
3 listings, of claims in the application using (Original) (Currently
4 Amended) (New) (Canceled) (Previously Presented) nomenclature, as
5 recited in the below listing of claims.

6
7 1. (Previously Presented) A hinge for positioning a left panel and
8 a right panel, the hinge comprising,

9 an inflatable bladder for encapsulating an inflation material,
10 a top film extending between the left and right panels, and
11 a bottom film extending between the left and right panels, the
12 top film and bottom film are circumferentially disposed about the
13 bladder, the top film having a top circumferential length, the
14 bottom film having a bottom circumferential length, the top and
15 bottom circumferential lengths for angularly positioning the left
16 and right panels as the inflatable bladder is inflated.

17
18 2. (Original) The hinge of claim 1 further comprising,

19 a flex circuit extending from the left panel and around the
20 bladder for electrically routing power from the left panel.

21
22
23 3. (Original) The hinge of claim 1 wherein,

24 the inflation material is a sublimation powder disposed in the
25 bladder for inflating the bladder.

26
27
28 ///

1 4. (Currently Amended) The hinge of claim 1 further comprising,
2 uncured resin disposed between the top and bottom films, the
3 uncured resin being cured by exposure to UV light, the uncured
4 resin being a curable resin being cured after deployment of the
5 hinge, and

6 a reflective coating disposed on the bladder for reflective UV
7 light into the uncured resin for curing the uncured resin to
8 rigidize the hinge to secure in position the top and bottom film
9 for permanently securing in position the left and right panels,

10
11
12 5. (Original) The hinge of claim 1 further comprising,

13 a left frame for securing the left panel to the top film and to
14 the bottom film and to the bladder, and

15 a right frame for securing the right panel to the top film and
16 to the bottom film and to the bladder.

17
18 6. (Original) The hinge of claim 1 further comprising,

19 a left frame for supporting the left panel to the top film and
20 to the bottom film and to the bladder,

21 a left adhesive layer for securing the left frame to the left
22 panel and to the top film and to the bottom film and to the
23 bladder,

24 a right frame for supporting the right panel to the top film and
25 to the bottom film and to the bladder, and

26 a right adhesive layer for securing the right frame to the right
27 panel and to the top film and to the bottom film and to the
28 bladder.

1 7. (Original) The hinge of claim 1 further comprising,
2 a flex circuit extending from the left panel and around the
3 bladder for electrically routing power from the left panel,
4 a plurality of ground pads disposed on the top and bottom films,
5 a plurality of extensions comprising conductive traces extending
6 from the flex circuit to the plurality of ground pads,
7 respectively, for distributively grounding the hinge.

8
9
10 8. (Original) The hinge of claim 1 further comprising,
11 a flex circuit extending from the left panel and around the
12 bladder for electrically routing power from the left panel,
13 a plurality of ground pads disposed on the top and bottom films
14 and disposed on and under the left and right panels, and
15 a plurality of extensions comprising conductive traces extending
16 from the flex circuit to the plurality of ground pads,
17 respectively, for grounding the hinge.

18
19 9. (Currently Amended) The hinge of claim 1 further comprising,
20 a flex circuit extending from the left panel and around the
21 bladder for electrically routing power from the left panel, the
22 left panel being a solar cell panel comprising a silver contact and
23 a thin film solar cell, the flex circuit comprising a conductor
24 trace connected to the silver contact for routing power from the
25 left panel and around the bladder.

26
27
28 ///

1 10. (Currently Amended) The hinge of claim 1 wherein the sun ejects
2 electrons producing a static electrical charge and the sun emits UV
3 light exposing the hinge to UV light and a static electrical
4 charge, the hinge further comprising,

5 uncured resin disposed between the top and bottom films, the
6 uncured resin being cured by exposure ~~the~~ to the UV light, the
7 uncured resin being a curable resin being cured after deployment of
8 the hinge, and

9 a coating disposed over the top and bottom films for passing UV
10 light and for conducting a static electrical charge, the coating
11 serving to discharge a static electrical charge accumulating on the
12 coating, the UV light curing the uncured resin to rigidize the
13 hinge to secure in position the top and bottom film for permanently
14 securing in position the left and right panels.

15
16
17
18
19
20
21
22
23
24
25
26
27
28 ///

1 11. (Currently Amended) The hinge of claim 1 wherein, the sun
2 ejects electrons producing a static electrical charge and the sun
3 emits UV light exposing the hinge to UV light and a static
4 electrical charge and , the hinge further comprising,

5 uncured resin disposed between the top and bottom films, the
6 uncured resin being cured by exposure to the UV light, the uncured
7 resin being a curable resin being cured after deployment of the
8 hinge, and

9 a transparent coating disposed over the hinge for passing UV
10 light and for conducting a static electrical charge, the coating
11 comprising indium tin oxide and magnesium fluoride, the transparent
12 coating serving to discharge a static electrical charge
13 accumulating on the transparent coating, the UV light curing the
14 uncured resin to rigidize the hinge to secure in position the top
15 and bottom film for permanently securing in position the left and
16 right panels.

17
18 12. (Previously Presented) The hinge of claim 1 wherein the left
19 panel is a solar cell panel for providing power, the hinge further
20 comprising,

21 a flex circuit extending from the left panel and around the
22 bladder and comprising a trace conductor for electrically routing
23 power from the left panel having an electrical contact and around
24 the bladder, and

25 a wrap around contact for electrically connecting the electrical
26 contact and the trace conductor.

27
28 ///

1 13. (Currently Amended) A hinge for positioning a left panel and a
2 right panel, wherein the sun ejects an electrical charge producing
3 a static electrical charge and the sun emits UV light exposing the
4 hinge to UV light and a static electrical charge, the hinge
5 comprising,

6 uncured resin,

7 a top film for encapsulating the uncured resin, the uncured
8 resin being cured by exposure to UV light, the top film having a
9 top circumferential length for defining a position between the left
10 and right panels, the uncured resin being a curable resin being
11 cured after deployment of the hinge, and

12 a coating disposed over the top film for passing the UV light
13 for curing the uncured resin and for static discharge protection of
14 the top film, the coating serving to discharge a static electrical
15 charge accumulating on the coating, the UV light curing the uncured
16 resin to rigidize the hinge to secure in position the top and
17 ~~bottom~~ film for permanently securing in position the left and right
18 panels.

19
20 14. (Currently Amended) The hinge of claim 13, the hinge further
21 comprising,

22 a bladder filled with a sublimation powdered for expanding the
23 bladder, and

24 a bottom film, the top film and bottom films are
25 circumferentially disposed about the bladder, the bottom film
26 having a bottom circumferential length, the top and bottom
27 circumferential length defining the position between the left and
28 right panels when the bladder has expanded.

1 15. (Original) The hinge of claim 13, wherein,
2 the coating comprises indium tin oxide and magnesium fluoride.
3
4

5 16. (Currently Amended) A hinge for positioning a left panel and a
6 right panel, where the sun emits UV light exposing the hinge to UV
7 light, the hinge comprising,

8 uncured resin, the uncured resin being a curable resin being
9 cured after deployment of the hinge, and

10 a top film coupled to the left and right panels and for
11 encapsulating the uncured resin, the uncured resin being cured by
12 exposure to the UV light, the top film having a top circumferential
13 length for defining an angular position between the left and right
14 panels, the UV light curing the uncured resin to rigidize the hinge
15 to secure in position the top film for permanently securing in
16 position the left and right panels.
17
18
19
20
21
22
23
24
25
26

27 ///